CLAIM LISTING

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A method for classifying an audio signal, the method comprising:

receiving an audio signal to be classified;

analyzing selected audio ~~signal~~ frequency components;

recording a result of analysis of the selected audio ~~signal~~ frequency components;

comparing the recorded result of analysis to a threshold value; and

classifying the audio signal based upon comparison of the recorded result of analysis and the threshold value.

2. (Previously Presented) The method according to claim 1, wherein classifying the audio signal based upon comparison of the recorded result of analysis and the threshold value further comprises:

if the recorded result of analysis is greater than the threshold value, then the audio signal is determined to be music; and

if the recorded result of analysis is less than the threshold value, then the audio signal is determined to be speech.

3. (Currently Amended) The method according to claim 1, wherein analyzing the selected audio ~~signal~~ frequency components comprises transforming the selected audio frequency components to the time domain and counting zero point transitions of the selected audio ~~signal~~ frequency components transformed to the time domain.

4. (Currently Amended) The method according to claim 1, wherein recording a result of analysis of the selected audio ~~signal~~ frequency components comprises

transforming the selected audio frequency components to the time domain and recording a count value of a number of zero point transitions of the selected audio ~~signal~~ frequency components.

5.   (Currently Amended) The method according to claim 1, further comprising selecting audio ~~signal~~ frequency components prior to analyzing selected audio ~~signal~~ frequency components, wherein said selecting audio ~~signal~~ frequency components comprises passing the audio signal through a low pass filter for filtering out audio ~~signal~~ frequency components having a frequency greater than a predetermined frequency thereby reducing an amount of audio information to be analyzed.

6.   (Currently Amended) The method according to claim 1, further comprising selecting audio ~~signal~~ frequency components prior to analyzing selected audio ~~signal~~ frequency components, wherein said selecting audio ~~signal~~ frequency components comprises passing the audio signal through a decimator, wherein every 1 in N audio ~~signal~~ frequency components is transmitted and audio ~~signal~~ frequency components between 1 and N are discarded.

7.   (Canceled)

8.   (Currently Amended) The method according to claim 1, further comprising:
        transmitting components of the audio signal having a frequency less than a predetermined frequency; and
        selecting a number of transmitted audio ~~signal~~ frequency components for analysis.

9.   (Previously Presented) The method according to claim 1, wherein classifying the audio signal occurs at a transmitting end of an audio transmission system.

10.   (Previously Presented) The method according to claim 1, wherein classifying the audio signal occurs at a receiving end of an audio transmission system.

11.   (Previously Presented) The method according to claim 1, wherein the audio signal is one of an analog signal and a digital signal.

12.   (Previously Presented) The method according to claim 1, wherein the threshold value used in the comparison is pre-determined and pre-set by a user.

13.   (Previously Presented) The method according to claim 1, wherein the threshold value used in the comparison determined through trial and error of a plurality of iterations in a comparing device.

14.   (Currently Amended) The method according to claim 1, wherein analyzing selected audio ~~signal~~ frequency components comprises counting zero point transitions of the audio signal for a predetermined period of time.

15.   (Previously Presented) The method according to claim 1, further comprising:
        converting the audio signal from an analog signal to a digital signal;
        encoding the audio signal;
        packetizing the audio signal;
        transmitting the audio signal;
        decoding the audio signal; and
        processing the audio signal, wherein processing at least comprises one of storing the audio signal and playing the audio signal.

16.   (Currently Amended) An apparatus for classifying an audio signal, the apparatus comprising:

at least one audio signal component reducer for selecting a reduced number of audio ~~signal~~ frequency components for analysis;

a zero point counter for counting and recording zero point transitions encountered in analysis of the selected audio ~~signal~~ frequency components;

a comparator for comparing a recorded result of analysis to a threshold value and classifying the audio signal based upon comparison of the recorded result of analysis and the threshold value; and

a circuit for packetizing the audio signal into packets, said packets including a header, said header including a flag indicating classification of the audio signal.

17.　(Previously Presented) The apparatus according to claim 16, wherein classifying the audio signal based upon comparison of the recorded result of analysis and the threshold value in the comparator further comprises:

if the recorded result of analysis is greater than the threshold value, then the audio signal is determined to be music; and

if the recorded result of analysis is less than the threshold value, then the audio signal is determined to be speech.

18.　(Currently Amended) The apparatus according to claim 16, wherein the at least one audio signal component reducer comprises at least one of:

a low pass filter that prevents transmission of components of the audio signal having a frequency greater than a predetermined frequency; and

a decimator.

19.　(Currently Amended) The apparatus according to claim 18, wherein the decimator selecting a reduced number of audio components for analysis comprises the decimator selecting every 1 in N audio ~~signal~~ frequency components to be transmitted and selecting the audio ~~signal~~ frequency components between 1 and N to be discarded.

20. (Previously Presented) The apparatus according to claim 16, further comprising at least one of an audio signal encoder and an audio signal decoder.

21. (Previously Presented) The apparatus according to claim 20, further comprising a speech/music classifying device being associated with the audio signal encoder.

22. (Previously Presented) The apparatus according to claim 20, further comprising a speech/music classifying device being associated with the audio signal decoder.

23. (Previously Presented) The apparatus according to claim 20, further comprising a signal processor and an audio processing unit associated with the audio signal decoder.

24. (Previously Presented) The apparatus according to claim 20, further comprising a bitstream multiplexer associated with the audio signal decoder.

25-26. (Cancelled).

27. (New) The method of claim 1, wherein selecting audio frequency components comprises selecting audio frequency components having a frequency greater than a predetermined frequency representing an upper boundary of human speech frequency.